

Amendments to the Claims:

1. (Canceled)
2. (Previously Presented) A method of controlling flare, comprising:
moving a material through a roll-forming process;
measuring the material to obtain a flare characteristic associated with a zone of
the material; and
automatically varying a position of a roller to change the flare characteristic
associated with the zone of the material as the material moves through the roll-
forming process.
3. (Previously Presented) A method as defined in claim 2, wherein the material is
at least one of a formed component, a strip material, or a sheet material.
4. (Canceled)
5. (Canceled)

6. (Previously Presented) A method of controlling flare, comprising:
- moving a material through a roll-forming process;
 - automatically varying a position of a roller to change a flare characteristic of the material as the material moves through the roll-forming process;
 - obtaining a flare measurement value associated with the material and a flare tolerance value;
 - comparing the flare measurement value to the flare tolerance value; and
 - determining a roller position value based on the comparison of the flare measurement value and the flare tolerance value; and
 - storing the roller position value in a database, wherein the roller position value may be retrieved from the database based on material identification information associated with the material.
7. (Previously Presented) A method as defined in claim 2, wherein automatically varying the position of the roller includes automatically varying the position of the roller in response to the comparison of a flare measurement value and a flare tolerance value.
8. (Previously Presented) A method as defined in claim 2, wherein the flare measurement value is associated with at least one of a flare-in condition or a flare-out condition.
9. (Canceled)

10. (Previously Presented) A method of controlling flare, comprising:
moving a material through a roll-forming process;
determining a location of the material within the roll-forming process; and
automatically varying a position of a roller based on the location of the
material within the roll-forming process to change a flare characteristic of the material
as the material moves through the roll-forming process.
11. (Previously Presented) A method as defined in claim 2, wherein the material
includes at least one of a C-shaped component or a Z-shaped component.
12. (Previously Presented) A method of controlling flare, comprising:
moving a material through a roll-forming process; and
automatically varying a position of a roller in accordance with at least one of a
desired roller velocity, a desired roller ramp rate, or a desired roller acceleration to
change a flare characteristic of the material as the material moves through the roll-
forming process.
13. (Previously Presented) A method as defined in claim 2, wherein automatically
varying the position of the roller includes automatically varying an angle of the roller.
14. (Previously Presented) A method of controlling flare, comprising:
moving a material through a roll-forming process; and
automatically varying a position of a roller based on a material characteristic
of the material to change a flare characteristic of the material as the material moves
through the roll-forming process.

15. (Previously Presented) An apparatus for controlling flare, comprising:
a processor system including a memory; and
instructions stored in the memory that enable the processor system to:
detect a material moving through a roll-forming process;
measure the material to obtain a flare characteristic associated with a
zone of the material; and
automatically vary a position of a roller to change the flare
characteristic associated with the zone of the material as the material moves
through the roll-forming process.
16. (Previously Presented) An apparatus as defined in claim 15, wherein the
material is at least one of a formed component, a strip material, or a sheet material.
17. (Canceled)
18. (Canceled)

19. (Previously Presented) An apparatus for controlling flare, comprising:
a processor system including a memory; and
instructions stored in the memory that enable the processor system to:
 obtain a flare measurement value associated with the material and a
 flare tolerance value;
 compare the flare measurement value to the flare tolerance value;
 determine a roller position value based on the comparison of the flare
 measurement value and the flare tolerance value;
 store the roller position value in a database; and
 retrieve the roller position value from the database based on material
 identification information associated with the material.
20. (Previously Presented) An apparatus as defined in claim 16, wherein the
instructions stored in the memory enable the processor system to automatically vary the
position of the roller in response to the comparison of a flare measurement value and a flare
tolerance value.
21. (Previously Presented) An apparatus as defined in claim 20, wherein the flare
measurement value is associated with at least one of a flare-in condition or a flare-out
condition.

22. (Previously Presented) An apparatus for controlling flare, comprising:
a processor system including a memory; and
instructions stored in the memory that enable the processor system to:
detect a material moving through a roll-forming process;
automatically vary a position of a roller to change a flare characteristic
of the material as the material moves through the roll-forming process; and
determine a location of the material within the roll-forming process.
23. (Previously Presented) An apparatus as defined in claim 22, wherein the
instructions stored in the memory enable the processor system to automatically vary the
position of the roller based on the location of the material within the roll-forming process.
24. (Previously Presented) An apparatus as defined in claim 15, wherein the
material includes at least one of a C-shaped component or a Z-shaped component.
25. (Previously Presented) An apparatus for controlling flare, comprising:
a processor system including a memory; and
instructions stored in the memory that enable the processor system to:
detect a material moving through a roll-forming process; and
automatically vary a position of a roller in accordance with at least one
of a desired roller velocity, a desired roller ramp rate, or a desired roller
acceleration.

26. (Previously Presented) An apparatus as defined in claim 15, wherein the instructions stored in the memory enable the processor system to automatically vary an angle of the roller.

27. (Previously Presented) An apparatus for controlling flare, comprising:
a processor system including a memory; and
instructions stored in the memory that enable the processor system to:
detect a material moving through a roll-forming process;
automatically vary a position of a roller based on a material
characteristic of the material to change a flare characteristic of the material as
the material moves through the roll-forming process.

28. (Previously Presented) A machine accessible medium having instructions
stored thereon that, when executed, cause a machine to:
detect a material moving through a roll-forming process;
measure the material to obtain a flare characteristic associated with a zone of
the material; and
automatically vary a position of a roller to change the flare characteristic
associated with the zone of the material as the material moves through the roll-
forming process.

29. (Previously Presented) A machine accessible medium as defined in claim 28,
wherein the material is at least one of a formed component, a strip material, or a sheet
material.

30. (Previously Presented) A machine accessible medium as defined in claim 28 having instructions stored thereon that, when executed, cause the machine to:

obtain a flare measurement value associated with the material and a flare tolerance value;

compare the flare measurement value to the flare tolerance value; and

determine a roller position value based on the comparison of the flare measurement value and the flare tolerance value.

31. (Previously Presented) A machine accessible medium as defined in claim 30 having instructions stored thereon that, when executed, cause the machine to store the roller position value in a database.

32. (Previously Presented) A machine accessible medium as defined in claim 31 having instructions stored thereon that, when executed, cause the machine to retrieve the roller position value from the database based on material identification information associated with the material.

33. (Previously Presented) A machine accessible medium as defined in claim 30 having instructions stored thereon that, when executed, cause the machine to automatically vary the position of the roller in response to the comparison of the flare measurement value and the flare tolerance value.

34. (Previously Presented) A machine accessible medium as defined in claim 30, wherein the flare measurement value is associated with at least one of a flare-in condition or a flare-out condition.

35. (Previously Presented) A machine accessible medium as defined in claim 28 having instructions stored thereon that, when executed, cause the machine to determine a location of the material within the roll-forming process.

36. (Previously Presented) A machine accessible medium as defined in claim 35 having instructions stored thereon that, when executed, cause the machine to automatically vary the position of the roller based on the location of the material within the roll-forming process.

37. (Previously Presented) A machine accessible medium as defined in claim 28, wherein the material includes at least one of a C-shaped component or a Z-shaped component.

38. (Previously Presented) A machine accessible medium as defined in claim 28 having instructions stored thereon that, when executed, cause the machine to automatically vary the position of the roller in accordance with at least one of a desired roller velocity, a desired roller ramp rate, or a desired roller acceleration.

39. (Previously Presented) A machine accessible medium as defined in claim 28 having instructions stored thereon that, when executed, cause the machine to automatically vary an angle of the roller.

40. (Previously Presented) A machine accessible medium as defined in claim 28 having instructions stored thereon that, when executed, cause the machine to automatically vary the position of the roller based on a material characteristic of the material.

41. (Previously Presented) A system for controlling flare, comprising:
a roller configured to vary a flare characteristic of a material;
a first sensor configured to detect the flare characteristic associated with a zone of the material; and
a position adjustment system coupled to the roller and the first sensor and configured to automatically adjust the roller to condition the flare characteristic associated with the zone of the material based on a measurement value obtained from the first sensor.

42. (Previously Presented) A system as defined in claim 41, wherein the material is at least one of a formed component, a strip material, or a sheet material.

43. (Previously Presented) A system for controlling flare, comprising:
a roller configured to vary a flare characteristic of a material; and
a position adjustment system coupled to the roller and configured to automatically adjust the roller based on a location of the material to condition the flare characteristic of the material.

44. (Previously Presented) A system as defined in claim 41, further comprising a processor system communicatively coupled to the position adjustment system and configured to cause the position adjustment system to adjust the roller.

45. (Previously Presented) A system for controlling flare, comprising:
a roller configured to vary a flare characteristic of a material;
a position adjustment system coupled to the roller and configured to automatically adjust the roller to condition the flare characteristic of the material;
a processor system communicatively coupled to the position adjustment system and configured to cause the position adjustment system to adjust the roller;
and
a sensor communicatively coupled to the processor system and configured to generate location information associated with the location of the material and convey the location information to the processor system.

46. (Canceled)

47. (Previously Presented) A system as defined in claim 41, wherein the first sensor includes at least one of a linear voltage displacement transducer, an optical sensor, a laser sensor, a proximity sensor, or an ultrasonic sensor.

48. (Previously Presented) A system as defined in claim 41, further comprising a feedback sensor configured to generate another measurement value after the flare characteristic of the material is varied by the roller.

49. (Previously Presented) A system as defined in claim 48, wherein the position adjustment system is configured to automatically adjust the roller based on the other measurement value.

50. (Previously Presented) A system as defined in claim 41, wherein the position adjustment system includes at least one of a servo motor, a stepper motor, a hydraulic motor, a pneumatic piston, or a threaded rod.

51. (Previously Presented) A system as defined in claim 41, further comprising a linear encoder operatively coupled to the position adjustment system and configured to generate a measurement value associated with a position of the roller.

52. (Canceled)

53. (Canceled)

54. (Canceled)

55. (Canceled)

56. (Canceled)

57. (Canceled)

58. (Previously Presented) A method as defined in claim 2, wherein automatically varying the position of the roller to change the flare characteristic associated with the zone of the material as the material moves through the roll-forming process comprises automatically varying the position of the roller to a first position as the zone of the material engages the roller and automatically varying the position of the roller to a second position as another zone of the material engages the roller.

59. (Previously Presented) A method as defined in claim 2, further comprising detecting a leading edge of the material and automatically varying the position of the roller in response to detecting the leading edge of the material.

60. (Previously Presented) A method as defined in claim 2, wherein automatically varying the position of the roller to change the flare characteristic associated with a zone of the material as the material moves through the roll-forming process comprises varying a position of the roller from a home position to a second position and returning the roller to the home position as the material exits the roll-forming process.

61. (Previously Presented) A method as defined in claim 60, further comprising determining a roller position value associated with varying the position of the roller to the second position based on a measured value of the flare characteristic.

62. (Previously Presented) An apparatus as defined in claim 15, wherein the instructions stored in the memory enable the processor system to automatically vary the position of the roller to a first position as the zone of the material engages the roller and automatically vary the position of the roller to a second position as another zone of the material engages the roller.

63. (Previously Presented) An apparatus as defined in claim 15, wherein the instructions stored in the memory enable the processor system to detect a leading edge of the material and automatically vary the position of the roller in response to detecting the leading edge of the material.

64. (Previously Presented) An apparatus as defined in claim 15, wherein the instructions stored in the memory enable the processor system to automatically vary the position of the roller to change the flare characteristic associated with the zone of the material as the material moves through the roll-forming process by varying a position of the roller from the a home position to a second position and returning the roller to the home position as the material exits the roll-forming process.

65. (Previously Presented) An apparatus as defined in claim 64, wherein the instructions stored in the memory enable the processor system to determine a roller position value associated with varying the position of the roller to the second position based on a measured value of the flare characteristic.